DOCUMENT RESUME

ED 273 512 SO 017 207

AUTHOR Hantula, James
TITLE Basic Skills in Asian Studies: India.
PUB DATE 86
NOTE 67p.; For related documents on China, Asian Studies in general, and Japan, see ED 200 493-494 and SO 017 405.
PUB TYPE Guides - Classroom Use - Guides (For Teachers) (052)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS *Asian Studies; *Basic Skills; Critical Thinking; Cross Cultural Studies; Geography; High Schools; *Learning Activities; Learning Modules; Learning Strategies; Reading Skills; Secondary Education; *Social Studies; Teaching Methods; World History
IDENTIFIERS Asia; *India

ABSTRACT

Designed for an Asian studies program at the secondary level and using learning activities centering on India, the guide develops four basic skills: reading, applying critical thinking, interpreting the geography, and understanding history. Five learning activities are provided for each basic skill and each unit is introduced with a description and concludes with two exercises for student practice. The guide focuses on different topics as starting points for the development of the basic skills. These include: allusions, coins of India, primary and secondary sources, reference books, continuing services, great leaders, historical fiction, the zero, festivals, pilgrimages, early maps, location of India, satellite images, strategic resources, population data, historic sites, important dates, related events, disasters, and the last word of Mrs. Gandhi. A checklist of skills, a test serving as a pre and post evaluation device and a list of references for further reading conclude the document. (TRS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED273512

Basic Skills in Asian Studies: India

James Hantula

University of Northern Iowa

Cedar Falls, Iowa

1986

SO017207

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
James Hantula

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Basic Skills in Asian Studies: India

Abstract

One of the priorities of Asian studies in the secondary school is development of basic skills. These skills include reading about Asia, applying critical thinking to Asia, interpreting the geography of Asia, and understanding the history of Asia. To aid the teacher in this task during instruction about South Asia, Basic Skills in Asian Studies: India provides twenty learning activities, a checklist of skills, and a test. Five learning activities are provided for developing each skill. Learning activities are introduced with a description and concluded with two opportunities for student practice. The checklist and test serve as a pretest and posttest evaluation device, respectively. A list of references is noted for further reading.

Basic Skills in Asian Atudies: India focuses upon different topics as take-off points for development of basic skills. These topics include: allusions, coins of India, primary and secondary sources, reference books, continuing sources, great leaders, historical fiction, the zero, festivals, pilgrimages, early maps, location of India, satellite images, strategic resources, population data, historic sites, important dates, related events, disasters, and the last word of Ms. Gandhi. Using this content, students develop skills and "advance" to the basics in Asian studies.

Table of Contents

Padma's Cousin . . . . . page 1

Learning Activities to Develop Skill in Reading

1. Defining Allusions . . . . . page 9
2. Translating Coins . . . . . page 11
3. Classifying Sources . . . . . page 13
4. Using Reference Books . . . . . page 15
5. Using Continuing Sources . . . . . page 17

Learning Activities to Develop Skill in Applying Critical Thinking

6. Identifying Great Leaders . . . . . page 19
7. Interpreting Historical Fiction . . . . . page 21
8. Applying Mathematical Skills . . . . . page 23
9. Analyzing Festivals . . . . . page 25
10. Evaluating Pilgrimages . . . . . page 27

Learning Activities to Develop Skill in Interpreting Geography

11. Reading Early Maps . . . . . page 29
12. Drawing Inferences . . . . . page 31
13. Interpreting Satellite Images . . . . . page 33
14. Analyzing Strategic Resources . . . . . page 35
15. Synthesizing Population Data . . . . . page 37

Learning Activities to Develop Skill in Understanding History

16. Locating Historic Sites . . . . . page 39
17. Making a Timeline . . . . . page 41
18. Constructing a Timetable . . . . . page 43
19. Analyzing Disasters . . . . . page 45
20. Evaluating the Last Word . . . . . page 47

Checklist . . . . . page 49

Test . . . . . page 51

Notes . . . . . page 59

References . . . . . page 61

Padma's Cousin

> A cousin of mine who went to live in London, that Little-Bombay-on-the-Thames, wrote home: "I miss our poor, dirty country. I miss all the things we celebrate." Not just nostalgia, no. In India, where so many have so little, festivals become a shared food that nourishes both the spirit and the senses, offering punctuations of release, reminder, supplication, and thanksgiving all in one. It's as if a pervasive <u>something</u> acknowledges how even if you don't have the circumstance for rejoicing you still have the innate capacity for it, and proceeds to provide some wherewithal. Such occasions are usually religious and often seasonal, but the subtext always remains human.[1]

For Padma's cousin and, probably, Padma, India is more than its many people. Festivals remind them both of that something which nourish their spirits and sustain their culture. Together with other ways of life, their culture is distinctive yet shares many values with other cultures. Festivals, after all, are reminders for all that occasions for celebrations may vary, but memory is always human despite poverty, dirt, and seemingly overwhelming problems. For elementary and secondary students, study of Padma's culture also offers an opportunity to be reminded again of the importance of home to everyone. One way to initiate and extend their human memory is by development of basic skills.[2]

In social studies education, an effective skills program develops both general and specific skills. Ten general skills are usually recommended to be developed. Eight of these skills are shared with other subjects; two skills are considered a primary responsibility of social studies education. The

eight shared skills are:

Locating information;

Organizing information;

Evaluating information;

Acquiring information through reading;

Acquiring information through listening and observing;

Communicating orally and in writing;

Interpreting pictures, charts, graphs, and tables;

Working with others.

The two primary skills are:

Reading social studies materials;

Applying problem-solving and critical thinking skills to social issues.[3]

In Asian studies, general skills are typically associated with an "inquiry" model of thinking.[4] According to this model, general skills in Asian studies can be developed in any curricula.[5] Recent discussion of skills education affirms preference for development of general skills in the context of decision-making.[6] In this context, for example, India is regarded as content for a common way of inquiry. The range of appropriate learning activities is presumably global. But in practice, recommended learning activities seldom include Indian content except at the lower levels of inquiry.

Moreover, common sense is typically applied in carrying out recommended learning activities. When confronted by different information about India, teachers of inquiry tend to process the information by analogies with the American experience. Study of the Hindu family, for example, often excludes the significant cultural differences between the family in India and in the United States. Accompanying skills outcomes tend to be indeterminate and vague.

Further, explicit references to India are few and usually negative and suggest that India is a terra incognita in general skills education.

Specific Skills

In addition to the ten general skills, two specific skills are also recommended to be taught. The two specific skills are primary skills; they are:

Interpreting maps and globes;

Understanding time and chronology.

Specific skills in Asian studies are typically associated with a "disciplines" model of thinking, especially with the disciplines of geography and history. In this context, India is regarded as content for the development of inquiry distinctive to each discipline.

The variety of learning activities for developing specific skills is usually great. But in practice, recommended learning activities seldom included non-Western content in more than one discipline. Implicit rather than explicit references to India are more numerous. Especially in geography, recommended learning activities which develop specific skills imply a global perspective.[7] Quite different is the Western perspective implied by recommended learning activities which develop specific skills in history.

Yet, both disciplines claim that India is "covered" by their distinctive skills. The claim is supported by use of uniform maps, globes, and timelines in developing specific skills. Unfortunately, use of these devices encourage uniform processing of information about the non-Western world. As a result, acquisition of easily manipulated abstractions about India is often substituted for precision in the classroom. Reliance upon uniform devices also encourages processing of information about the non-Western world with older ideas. Some learning activities, for example, process information about "when" by

developing skill in using a uniform timeline. This device expresses well the observation of Sophocles that:

> All things the living and countless lapses of time
> Bring forth, displays, then hides once more in gloom.[8]

An "Advance" to the "Basics"

Accordingly, a "return" to these "basics" does not bode well for skills education nor Indian studies. Judging from recommended learning activities, the "basics" include little Indian content. Common sense is used in viewing darkly the terra incognita for India. Recommended learning activities for developing general skills enable a student to learn about the homeostatic world of the West. Uniform devices used in developing specific skills are mirrors rather than windows to the world or Indian culture.

In contrast, increased study of India provides several take-off points for an "advance" to the basics in skills education. Inclusion of more Indian content in learning activities makes possible more precise and global skill development. Appropriate learning activities include more Indian content at different levels and stimulate different ways of inquiry in the development of general skills. They employ different devices for processing information about India in the development of specific skills.

One take-off point is infusion of different topics about India which serve as the content for development of primary social studies skills. Illustrative learning activities are described by Basic Skills in Asian Studies: India. Twenty learning activities are described for developing primary social studies skills. Five learning activities are described for developing each primary skill.

For developing skill in reading about India, learning activities focus upon:

1. defining allusions;
2. translating coins;
3. classifying sources;
4. using reference books;

and 5. using continuing sources.

For developing skill in applying critical thinking about India, learning activities focus upon:

6. identifying great leaders;
7. interpreting historical fiction;
8. applying mathematical skills;
9. analyzing festivals;

and 10. evaluating pilgrimages.

For developing skill in interpreting the geography of India, learning activities focus upon:

11. reading early maps;
12. drawing inferences about location;
13. interpreting satellite images;
14. analyzing strategic resources;

and 15. synthesizing population data.

For developing skill in understanding the history of India, learning activities focus upon:

16. locating historical sites;
17. making a timeline;
18. constructing a timetable;
19. analyzing disasters;

and 20. evaluating the last word of Ms. Gandhi.

In carrying out these learning activities, the following procedures are

recommended:

1. Allow adequate time for teaching;
2. Provide an encouraging instructional environment;
3. Teach each skill in small steps;
4. Correct student mistakes;
5. Have students practice each skill;
6. Recycle students through the new materials until they achieve mastery;

and 7. Evaluate student classwork with a pretest and posttest.[9]

Basic Skills in Asian Studies: India is useful for teaching procedures 3, 5, and 7.

To implement procedures 3 and 5, five learning activities are provided for developing each primary skill. Limited to two pages, each learning activity is a self-contained module of instruction. On one page, each learning activity is introduced with a Description of a small step towards acquiring each primary skill. On the second page, each learning activity provides two opportunities to practice the primary skill. Entitled Test Yourself, these opportunities are intended to provide practice and stimulate class discussion of the learning activity.

To implement procedure 7, a Checklist and a Test are provided to evaluate student classwork. The Checklist is a pretest of a student's knowledge of the four primary skills. It is divided into four parts; each part focuses upon a primary skill. On the Checklist, a student is asked to respond to five items which pertain to each primary skill. The student responds with a "yes," "no," or "sometimes." "Yes" responses may indicate further development is not necessary. "No" and "sometimes" responses indicate further development is necessary during the study of India.

The Test is a posttest of a student's knowledge of the four primary skills developed by the twenty learning activities. It is divided into four parts; each part focuses upon a primary skill. On the Test, a student is asked to respond to ten items which pertain to each primary skill. The student responds by making the best possible choice among four answers to multiple choice questions. The correct answer to the question is circled on the Test. The Test is also divided into two levels of achievement. Level I requires recall of the primary skill; Level II requires application of the primary skill. Twenty items are associated with each level.

The table of specifications for the Test is indicated below for skill content and skill level by item number.

Skill Content	Skill Level I	Skill Level II	(Total)
Reading Materials on India	1,3,5,7,9	2,4,6,8,10	10
Applying Critical Thinking about India	11,13,15,17,19	12,14,16,18,20	10
Interpreting the Geography of India	21,23,25,27,29	22,24,26,28,30	10
Understanding the History of India	31,33,35,37,39	32,34,36,38,40	10
(Total)	20	20	40

Basic Skills in Asian Studies: India was field tested with secondary students enrolled in the Northern University High School division of the Malcolm Price Laboratory School, University of Northern Iowa, Cedar Falls, Iowa 50613. Adapted to student maturity, these materials were used in several ways. The checklist was used to determine the need to emphasize particular skills. Learning activities were infused during a unit on India and were a "text" for a separate skills class. The test was used as an independent evaluation measure.

Other ways to develop primary social studies skills in Asian studies during a study of India can be readily devised by the creative teacher.

To aid the teacher in this task, a list of References concludes Basic Skills in Asian Studies: India. On the list, a reference is provided for additional information in order to extend each learning activity. Together, they suggest India will not remain a terra incognita in skills education. Moreover, they affirm skill development is basic during a study of India. Focusing upon the primary social studies skills, they offer hope that the serious decline in skill development can be abated with an appropriate advance to the basics in Asian studies and other social studies.

How secondary students are to learn about the world on one's own is one of the more important questions facing the social studies teacher. One answer to this question in Asian studies is by development of primary social studies skills during a study of India. Development of reading, thinking, geography, and history skills results in genuinely global knowledge of the culture(s) of India; it enables students to become amphibians across the multiple spheres of place and time. Concerned with the heart and mind of each student, these basic skills in Asian studies are people's skills; they enable students to understand better the world of Padma and his cousin.

Learning Activities to Develop Skill in Reading

1. Defining Allusions

Description: Allusions are references to phrases, terms, names, events, and other occurrences which were once popular or thought to be important. Unfortunately, many allusions are omitted from standard dictionaries and encyclopedias. Yet, many use allusions as if everyone knows what they mean. Such allusions include nicknames, names of alliances, rules, various conspiracies, leagues, massacres, mutinies, plots, protests, riots, secret societies, wars, and informal terms for certain laws. In discussing India, some of the more common allusions are noted below.

Bengal Mutiny

Black Hole of Calcutta

Brahmins

Greased Cartridges

India Act

Parsees

Settlement of India Act

Slave Kings

Thugs

Test Yourself:

I. Use the above information and determine if the following statements are true or false. Mark a + if the statement is true. Mark a 0 if the statement is false.

_____ 1. Allusions are precise terms.

_____ 2. An informal term for riot is probably an allusion.

_____ 3. An article about "thugs" is an article about an allusion.

_____ 4. Allusion is another word for fact.

_____ 5. Allusions are often not noted in standard references.

II.

1. Use a library reference and determine the subject of five allusions noted on the verso.

2. Which of these allusions are to events in modern times?

3. Write an American allusion which parallels each of the allusions noted above.

4. Is it correct to say that each of these allusions are described in an encyclopedia? Give a reason for your answer.

5. Which of the following are more useful in explaining how Indian culture works: allusions, dates, places, leaders, events, arts. Give a reason for your answer.

2. Translating Coins

Description: Coins are examples of material culture. Translating coins suggests that they serve several functions. These functions include: as a medium of exchange, legal tender, expression of wealth, evidence of social status, and illustration of political power. In India, many different coins have been minted in the past and in the present. Some of the more popular coins are listed below:

British India
Portuguese India
Republic of India (Bharat)
Alwar
Bahawalpur
Baroda
Bengal
Bhutan
Bikanir
Bombay
Dewas
Dhar
Gwalior
Hyderabad
Indore
Jaipur
Jaora
Kutch
Madras
Mewar Udaipur
Sailana
Travancore

Test Yourself:

I. Use the above information and determine if the following statements are true or false. Mark a + if the statement is true. Mark a 0 if the statement is false.

_____ 1. Coins are examples of material culture.

_____ 2. Unlike other cultures, coins in India serve one function.

_____ 3. Coins of the India's ancient past are coins of Bharat.

_____ 4. British India used the same coins as did Portuguese India.

_____ 5. Many different coins have been used in India.

II.

1. Use a library reference and determine which of the coins noted on the verso are coins of the States of India. Circle the names of the States.

2. Find a picture of five different coins of India and draw both sides.

3. Determine the present value of each coin in terms of dollars used in the United States.

4. Determine the value of each coin as a "collector's item."

5. Draw five conclusions regarding a function of these Indian coins.

3. Classifying Sources

Description: Sources on India can be divided into two groups. One group includes original accounts. They are first hand accounts which provide information about an event when it happened. For example, a speech by M. Gandhi is a first hand account. Similar first hand accounts are classified as primary sources. The second group includes sources which are not original. They are second hand accounts which provide other than eyewitness information about an event. For example, a biography of Gandhi written by an American student is a second hand account. Similar second hand accounts are classified as secondary sources. Primary sources are usually more useful as they provide information furnished by people involved in the event described by the sources. Like secondary sources, however, the information may or may not be true.

Some sources on India include the following:

A travel guide to India today;

Reproductions of early European maps of India;

Background narrative in a textbook;

An encyclopedia on India;

A study of the social life of the English in eighteenth century India;

Sources of the history of India;

Eyewitness account of the assassination of Indira Gandhi;

Official report on a poison gas leak in India.

Test Yourself:

I. Circle the primary sources listed above. Underline the secondary sources. Label with the letter F any source which is fiction. Determine if the following statements are true or false about these sources. Mark a + if the statement is true. Mark a 0 if the statement is false.

_____ 1. All of the sources are primary or secondary sources.

_____ 2. Each of the underlined sources is a first hand account.

_____ 3. Each of the circled sources was written by a person involved in the event described by the source.

_____ 4. Primary and secondary sources are true accounts.

_____ 5. A history textbook is a secondary source.

II.

1. Make a list of the secondary sources underlined above. Change the title of the source to indicate, if actually written, a primary source of information.

(A) List of Secondary Sources	(B) Changes into Primary Sources
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Using the sources listed in (B), answer the following questions with a "yes" or "no."

2. Does list (B) indicate first hand accounts?
3. Does list (B) indicate the author was involved in the event described by the source?
4. Does list (B) include examples of fiction?
5. Use the library and make a list of 5 primary sources and 5 secondary sources not included above.

4. Using Reference Books

Description: Reference books can be divided into two groups. One group includes reference books which contain information on India and other places in the world such as almanacs, atlases, collections of primary sources, dictionaries, encyclopedias, and yearbooks. These books are called general references. The other group includes reference books which contain information on India and not on other places in the world. These books are called special references. Some of the general and special reference books on India are listed below.

General Reference Books

Asia Yearbook (Hongkong: Far Eastern Economic Review, Annual)

Facts on File (New York: Facts on File, Annual)

Showers, Victor, World Facts and Figures (New York: Wiley, 1979)

Times Atlas of World History (New York: Hammond, 1978)

Worldmark Encyclopedia of Nations (New York: Wiley, 1976)

Historical Maps on File (New York: Facts on File, 1984)

Special Reference Books

deBary, William T., Sources of Indian Tradition (New York: Columbia, 1958)

Mamoria, C.B. Economic and Commercial Geography of India (New Delhi: Shiva Lal Agarwala, 1980)

India: A Reference Annual (Delhi: Ministry of Information & Broadcasting, Annual)

India: Who's Who (New Delhi: INFA, Annual)

Times of India Directory and Yearbook (Bombay: Bennet, Annual)

Test Yourself:

I. In the above list, circle the references available in the school library. Determine if the following statements are true or false. Mark a + if the statement is true. Mark a 0 if the statement is false.

_____ 1. All of these reference books are in the school library.

_____ 2. General reference books and special reference books provide basically the same information.

_____ 3. Included in the list of general reference books is a collection of primary sources.

_____ 4. Included in the list of special reference books is a statistical abstract.

_____ 5. The best source of information on India is an almanac.

II.

1. Use each of the circled reference books. Note the title, one fact which you located in the reference, and the page number on which this fact is discussed.

Reference Title	One Fact	Page Number

2. Locate five other reference books which have information on India. Classify each book as a general reference book or a special reference book. Note the title and call number of each book.

Call Number	General Reference Books	Call Number	Special Reference Books

5. Using Continuing Sources

Description: In addition to reference books, continuing sources provide general and, usually, current information. Continuing sources are sources published often with "updated" information. They include articles in newspapaers, magazines, and professional journals. Some continuing sources of information about India, published in English, are listed below with a brief annotation.

Economic Times, provides daily information about the Indian economy.

Hindu, the only major daily newspaper with in-depth coverage of local south Indian "news."

Illustrated Weekly of India, the most popular general interest weekly published in India.

India Today, much like Time and Newsweek.

Indian Economic Diary, a weekly digest of Indian economic events.

Indian Express, has the largest combined circulation among Indian daily newspapers.

Link, another "newsmagazine" much like Time and Newsweek.

Marg, a magazine of the arts, well illustrated, with each quarterly issue devoted to one art form.

Times of India, oldest daily newspaper published in English.

Test Yourself:

I. In the above list, circle the continuing sources available in the school library. Determine if the following statements are true or false. Mark a + if the statement is true. Mark a 0 if the statement is false.

_____ 1. All of these continuing sources are in the school library.

_____ 2. All of these continuing sources provide basically the same information.

_____ 3. Included in the list are materials published by the government of India.

_____ 4. An appropriate addition to this list would be Time.

_____ 5. The best continuing source of information on economic conditions in India is the Times of India.

II.

1. Use each of the circled continuing sources. Note the title, one fact which you located in the source, date, and page number on which this fact is discussed.

Source Title	One Fact	Date	Page Number

2. Locate five other continuing sources of information on India. Note the title and the title of one article in each source.

Title	Title of the Article

Learning Activities to Develop Skill in Applying Critical Thinking

6. Identifying Great Leaders

Description: As in other regions of the world, there are many great leaders in South Asia. Some leaders are considered to be great because of their public achievements. Their achievements may be political, economic, or social. Others are considered to be great because of their personal qualities which make them into extraordinary people. These qualities include being very perceptive, appealing to others as a model, and attracting interest in other cultures. Very great leaders have public achievements and personal qualities. Several great leaders are noted below.[10]

Buddha

Alexander the Great

Chandragupta Maurya

Asoka

Mohammed

Akbar

George V

Mohandas Gandhi

Test Yourself:

I. Use library resources and determine if the following statements are true or false. Mark a + if the statement is true. Mark a O if the statement is false.

_____ 1. All of these leaders were important in the history of India.

_____ 2. Some of these leaders were great because of personal qualities.

_____ 3. Some of these leaders were kings or rulers.

_____ 4. All but one of these leaders lived before the founding of the thirteen colonies in North America.

_____ 5. Two of these leaders existed only in the minds of people.

II.

1. Determine the birth and death dates of each leader.

2. List two achievements for each leader.

3. Contrast and compare two leaders in India with two great leaders in China.

4. Contrast and compare two other leaders in India with two great leaders in Japan.

5. Is it correct to say that Mohandas Gandhi was probably the greatest leader of India? Give two reasons for your answer.

7. Interpreting Historical Fiction

Description: In many ways, historical fiction provides a more complete, if imaginative, picture of the way life was in a culture. When consistent with factual information, historical fiction provides "flesh and blood" to the bare bones of history. Moreover, like other sources of information, it can provide different perspectives to the same set of facts. Historical fiction about India can be divided into two categories. One category is historical fiction written by "Indians" about India; the other category is historical fiction written by "foreigners" about India. Each category may include books which are consistent with fact yet provide a different perspective.

Reviewers of a set of four novels about India's past, for example, offered the following comments:

"A veritable Taj Mahal of a book."

". . . when men and women are wondering what India in the 1940s was like they should read these books."

"This is a superb saga of the decline and fall of the British Raj."

"Has made for a fine Mobile Masterpiece Theatre Presentation on television."

". . . a 'jewel' of a book."

Test Yourself:

I. Use the above information and determine if the following statements are true or false. Mark a + if the statement is true. Mark a O if the statement is false.

_____ 1. Historical fiction is a true story.

_____ 2. Historical fiction can provide different perspectives.

_____ 3. Unlike other cultures, India has little historical fiction.

_____ 4. Reviews of the book noted on the verso did not like the book.

_____ 5. This book probably belongs to the category of books written by "Indians."

II.

1. Use a reference book and define the terms: Taj Mahal, raj, fiction, historical, novel.

2. Is it correct to say that the book which was reviewed on the verso was Paul Scott's The Raj Quartet? Give a reason for your answer.

3. Explore the library and locate an example of historical fiction written by an "Indian" and by a foreigner. Read and write a précis of one of the books.

4. Contrast and compare this book with an example of American historical fiction.

5. Contrast and compare this book with a historical account of the same events.

8. Applying Mathematical Skills

Description: One of the basic ideas in mathematics is the concept of the zero. Most likely, it was invented in India during ancient times. Later, Arab travelers to India described the zero in various reports during the middle ages. These reports were read by Europeans and stimulated further thought about the zero. Today, many think the zero is a mathematical idea. Others think the zero is a scientific idea. Some think the zero is neither a mathematical nor a scientific idea. They think the zero is an idea which represents the real world. Some of their comments about the zero are noted below.

Comment #1

The zero has its position in all branches of thought. It is the productive point of indifference and balance. It is the no more and not yet thing. It is an irrational something not expressible in any number, not yet in their combinations.

Comment #2

Infinity is the land of mathematical hocus pocus. There zero, the magician, is king. When zero divides any number he changes it without regard to its magnitude into the infinitely small (great?), and inversely, when divided by any number he begets the infinitely great (small?). In this domain the circumference of the circle becomes a straight line, and then the circle can be squared. Here all ranks are abolished, for zero reduces everything to the same level one way or another. Happy is the kingdom where zero rules![11]

Comment #3

Zero is the number associated with the empty set. It is connotated by the word "zero."[12]

Test Yourself:

I. Using the above comments, identify a mathematical definition of the zero with the letter M. Identify a scientific definition with the letter S. Identify a definition which is neither mathematical nor scientific with the letters NMS. Determine if the following statements are true or false. Mark a + if the statement is true. Mark a 0 if the statement is false.

_____ 1. The zero is an idea.

_____ 2. The zero was invented in Europe.

_____ 3. All of the comments are definitions of the zero.

_____ 4. Comment #1 is a mathematical definition of the zero.

_____ 5. Comments #2 and #3 are scientific definitions of the zero.

II.

1. Write a definition of the zero used in a mathematics class.
2. Contrast and compare this definition with a definition of the zero used in a social studies class.
3. From which of the following religious traditions did the concept of zero probably emerge: Hinduism? Buddhism? Christianity? Give a reason for your answer.
4. Describe one use of the zero in computer science, social science, Asian studies, geography, history, earth scienc.
5. Is it correct to say that the following advice of Buddha illustrates mathematical thinking? Give a reason for your answer.

> Believe nothing on hearsay. Do not believe in traditions because they are old, or in anything on the mere authority of myself or any other teacher.[13]

9. Analyzing Festivals

Description: Festivals are one way in which many celebrate life in South Asia. Many festivals are religious, some seasonal; variations in celebrating life at festivals occur among different regions. In Central India, for example, the "Pola" festival centers upon the bullocks who have helped cultivate the earth. On that day, one eats only garden produce, not the results of a plowed field. In other regions, the new crops provide the ingredients of a meal. Some celebrations are only few minutes in length such as the lighting of a lamp at a household shrine in honor of Agni (a Vedic fire god).

Other celebrations are much longer and involve many activities. One of these celebrations is the festival for the elephant-headed god known as Ganesha. A description of this festival in the state of Maharashtra is noted below.[14]

> "Ganesh Chaturti," lasting ten days, is a big event in the state of Maharashtra, from its capital Bombay and cities like Poona to rural areas all over. Like everything else, it is more than religious, but with a difference. . . a million images of Ganesha are still carved or molded in clay. Neighborhoods, shopkeepers, civic and motley groups gather to erect painted or sculpted tableaux of Ganesha's doings at every other street or main corner, often voicing their concerns and comments through him. Three years ago when the Chief Minister of the state was implicated in a scam involving tons of cement, sure enough there stood Ganesha vividly knocking the man off his throne of cement bags. The year Americans reached the moon, another tableau showed Ganesha, truck uplifted, welcoming Armstrong to a lunar landscape. Down one street of a Poona neighborhood adjacent to ours, a gymnasium carved a life-size statue of Ganesha outside its gate. Painted bright blue, he was buldging with muscles and wielding a club.

Test Yourself:

I. Use the above information and determine if the following statements are true or false. Mark a + if the statement is true. Mark a 0 if the statement is false.

_____ 1. Celebrating life is important in South Asia.

_____ 2. Festivals in South Asia are like festivals in the United States.

_____ 3. Every festival in India is usually one day in length.

_____ 4. Festivals are often religious in nature.

_____ 5. Festivals are celebrated for different reasons.

II.

1. Is it correct to say that festivals are always "serious" in India? Give two reasons for your answer.

2. Describe two ways in which "Ganesh Chaturti" is more than a religious festival.

3. Why would some believe, apparently, that Ganesha welcomed the American astronaut, Armstrong, upon his landing upon the moon?

4. Use library resources and write a brief historical sketch upon the life of Ganesha.

5. A person born in India, but now living in London, wrote home: "I miss our poor, dirty country. I miss all the things we celebrate." Why were celebrations important to this person?

10. Evaluating Pilgrimages

Description: For many in South Asia, making a pilgrimage is an important task in life. To make a pilgrimage is to throw down a challenge to everyday life. Nothing else is important but the adventure of the travel. Some pilgrimages take days and months. Others take as long as it takes the mind to travel to a special place. A pilgrimage may be towards a sacred mountain where a temple exists. Young men, women in the prime of life, widows in their saris, even those on crutches, make pilgrimages as adventures in self conquest. Their whole life is questioned as they consider its high points and low points, its rewards and dangers.

For the elderly, there is one pilgrimage which must be made. It is a journey to the mouths of the Ganges River. This pilgrimage takes place in January, at the coldest time of the year. Noted below is a description of the many who make the pilgrimage.[15]

> It is hard to imagine the scene: four hundred thousand pilgrims huddled together on the docks of the town; the solid mass of tents and huts with their stone hearths and copper pots; old trucks, motor coaches, carts, sightseeing buses, horses, and oxen; no children, no young people, only the misery of the old pilgrims waiting for the boat to take them to the Delta. That lasts several days, during which a sort of mela or country fair springs up with stalls of fruit and vegetables.
>
> The exhausting march to the bathing place lasts four or five days. It is an effort that shatters the body's limits of resistance. The only shelters at night are improvised huts, and most of the pilgrims sleep under the stars. With the plunge into the water where the Ganges enters the ocean, the ego is dissolved; it is a pure act of renunciation which frees the energies and gives the vision of a widening horizon.

Test Yourself:

I. Use the above information and determine if the following statements are true or false. Mark a + if the statement is true. Mark a 0 if the statement is false.

_____ 1. Making a pilgrimage is like taking a vacation.

_____ 2. Pilgrimages can be real or imaginary.

_____ 3. A pilgrimage to the mouths of the Indus River must be made by believers.

_____ 4. Pilgrims make their journeys alone.

_____ 5. Only old people make pilgrimages.

II.

1. On one pilgrimage to a mountain, the guide said: In the quiet of your being, feel the gushing of the fountain: "Thou art That." Tell what he meant in your own words.

2. Use library resources and locate on an outline map the following "lands" to which pilgrims travel in South Asia:

Badri Narayan;

Kanya Kumari;

Temple of Kamakhya.

3. Judging from the location of these "lands," note significant geographic feature of each.

4. Is it correct to say that only Hindus make pilgrimages? Give two reasons for your answer.

5. Are pilgrimages "intimate journeys?" Give two reasons for your answer.

Learning Activities for Developing Skills in Interpreting Geography

11. Reading Early Maps

Description: During the Age of Exploration, maps were few; cartography was an art as well as a science. Many map makers added various crests, imaginary and real animals, and other "artwork" to make their maps more "realistic." By modern standards, these maps often seem childish and not very informative. However, they do not provide insight into the available knowledge and cultural values of the producer and consumer of maps. Moreover, accounts by explorers, which accompany many maps, provided the only knowledge about the "outside world." Many of these accounts were published in various books and folios.

A major effort was the 12 volume set by Richard Hakluyt entitled The Principal Navigations Voyages Traffiques and Discoveries of the English Nation, first published in 1589. This set provides first hand accounts and include the discovery of the Artic, journeys to the "Far East," the efforts of Sir Francis Drake, and the colonization of Virginia by Sir Walter Raleigh. Passages in the set written by the travellers are in their original languages with English translations. They describe sea travel, overland travel, trade, wars, and other matters concerning their exploits.

Test Yourself:

I. Use the above information and determine if the following statements are true or false. Mark a + if the statement is true. Mark a O if the statement is false.

_____ 1. Maps are basically the same in early history as now.

_____ 2. Early mapmakers often "embellished" their maps.

_____ 3. A major publication of early maps was by Richard Hakluyt.

_____ 4. His book probably includes discussion of the discovery of America.

_____ 5. His book contains primary sources.

II.

1. Locate Hakluyt's set of books in the library and list four voyages which pertain to the "discovery" of India.

2. Read an account about a voyage and rewrite the account in your own words.

3. Study the maps which accompany the account. Is it correct to say that India was discovered in the Age of Exploration? Give a reason for your answer.

4. Contrast and compare the maps in Hakluyt with other reference books on early maps.

5. Draw a map of the world without using an atlas and trace a route to India. Add to your map pictures and symbols which represent your perception of India. Is your map a true map? Explain your answer.

12. Drawing Inferences

Description: Inferences are conclusions based upon available evidence. Inferences can be classified as Type 1 and Type 2. Type 1 inferences are implications based upon hints. These inferences are made indirectly from information. Type 2 inferences are deductions based upon facts. These inferences are made directly and result in logical conclusions. For example, a student read the following description of the location of India.[16]

> India is in the northern hemisphere. Its territory makes it the seventh largest country in the world with a total land area of 1,261,000 sq. miles and a coastline of 3,535 miles. In the north, the Himalayas separate India from China. Situated between the two countries is Nepal, and to its east, Bhutan, which is still closely connected to India by special treaty. All three lie along the chain of the Himalayas, and still more mountains separate India from Burma on the former's eastern border. Also in the east lies Bangladesh, wedged in between the Indian states of West Bengal and Assam. In the northwest, Pakistan and a very small hook of Afghanistan border India and separate it from the USSR.

After reading this description, the student made the following statements.

1. Six countries in the world are larger than India.
2. The USSR shares a border with India.
3. The coastline of India is approximately the same number of miles as it is across the United States.
4. India is in the Eastern Hemisphere.
5. Its geography influenced development of a distinctive religion.

Test Yourself:

I. In the above list, circle the statements which are Type 1 inferences. Underline the statements which are Type 2 inferences. Determine if the following statements are true or false. Mark a + if the statement is true. Mark a 0 if the statement is false.

_____ 1. All of the above statements are inferences.

_____ 2. Any conclusion is an inference.

_____ 3. Type 1 inferences are based upon facts and logic.

_____ 4. Type 2 inferences are based upon hints.

_____ 5. Most of the above statements are Type 2 inferences.

II.

Make two additional inferences from the information about the location of India.

1. _____

_____

2. _____

_____

3. & 4. Classify the inferences as Type 1 or Type 2. Give a reason for your answer.

Inference Type

1. _____ Reason _____

2. _____ Reason _____

5. Is it correct to say that Bharat would probably accept this description of the location of India? _____

Explain your answer.

13. Translating Satellite Images

Description: One way to view the South Asian landscape is with Landsat, an unmanned satellite used for surveying the earth's surface and resources. Landsat gathers data primarily through remote sensing which records electromagnetic radiation ranging from the ultraviolet to the microwave portions of the spectrum. Many experts apply this information to solving practical problems including food production and energy supplies. Landsat images make it possible to visualize land surfaces with enough clarity to recognize many natural and cultural features. Moreover, Landsat images are quite striking as works of scientific art.

In a Landsat image, natural colors have been changed. However, the changes are consistent and represent different physical features. Landsat colors and the features which they illustrate are described on the chart below.

Landsat Color	Physical Features
Shades or red	Growing vegetation, forests, grassland, crops
Light pink to light brown	Harvested cropland
Light brown to white	Dry land, no vegetation
Browns and yellows	Rocks and soil, rangelands
Pure white	Clouds or snow & ice
Bluish gray	Cities and towns
Bluish black in patterns	Cities and highways
Dark blue or black	Clear, deep water
Light blue	Muddy, silted, polluted water, usually shallow

Landsat images of South Asia are noted below.[17]

A. Baluchistan Mountains
B. Baluchistan Desert
C. Indus River Plains
D. Gulf of Kutch
E. Gulf of Cambay
F. Aravalli Range
G. Peninsular Interior
H. Nepal
I. Ganges Delta
J. Brahmaputra River

Test Yourself:

I. Circle the images which depict geographic features in India. Determine if the following statements are true or false. Mark a + if the statement is true. Mark a 0 if the statement is false.

_____ 1. Some of these images indicate India is mountainous.

_____ 2. A likely place for testing nuclear devices is illustrated by image H.

_____ 3. These images suggest India and Japan have similar natural features.

_____ 4. No cultural features are shown by the images.

_____ 5. Each image is factually correct.

II.

1. Locate ten natural and cultural features indicated by the images on an outline map of South Asia.

2. Match the following places with the appropriate images.

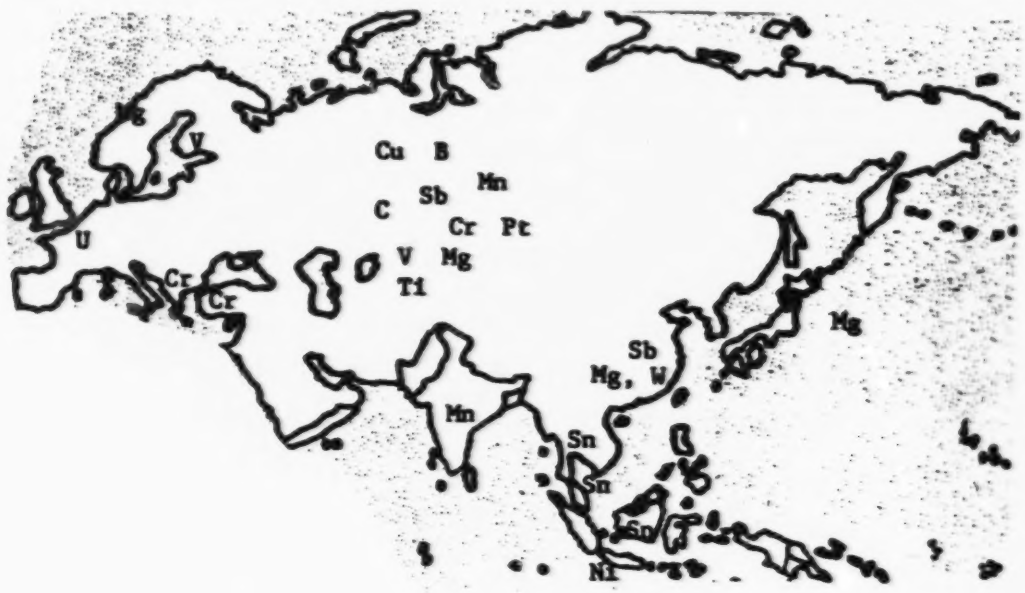
Images	Places
A	Built up area into the ocean
B	Area entirely within the State of Andhra Pradesh
C	The "top of the world"
D	A region of desert steppe
E	Area located in the State of Gujarat
F	Major river in eastern India
G	Border between western Pakistan and Eastern Iran
H	Area with a major fault line.
I	
J	

3. Make a list of comparisons and contrasts between India and the United States suggested by the Landsat images of both nations.

14. Analyzing Strategic Resources

Description: Industrial nations, including the United and Japan, depend upon other nations to supply certain resources which are vital to their economic and security needs. These resources include antimony, bauxite, chromium, cobalt, copper, manganese, platinum, uranium, vanadium, tungsten, tantalum, tin, nickel, columbium, and gold. Four of these resources are most important: chromium, cobalt, manganese, and platinum. Chromium is used to produce stainless steel and plate metals. Cobalt is used for making high-strength steel alloys, manganese for hardening steel (among other uses), platinum for certain communication equipment and refining processes.[16]

The locations of some of these strategic resources in Eurasia are shown on the map below.



KEY

B	= Bauxite	Cu	= Copper	Pt	= Platinum
C	= Diamond	Cr	= Chromium	Sb	= Antimony
Co	= Cobalt	Mn	= Manganese	Sn	= Tin
U	= Uranium	Ti	= Titanium		
Au	= Gold	W	= Tungsten		
Ni	= Nickel	V	= Vanadium	Mg	= Magnesium

Test Yourself:

I. Use the above information and determine if the following statements are true or false. Mark a + if the statement is true. Mark a 0 if the statement is false.

_____ 1. Industrial nations are self sufficient.

_____ 2. Strategic resources are information resources.

_____ 3. An example of strategic resources is timber.

_____ 4. An important strategic resource in India is manganese.

_____ 5. Japan has many strategic resources.

II.

1. Use a reference and determine a strategic use of the resources noted on the verso.

2. Identify three strategic resources located in mainland China.

3. Which resource is more available in the People's Republic of China? India? Japan?

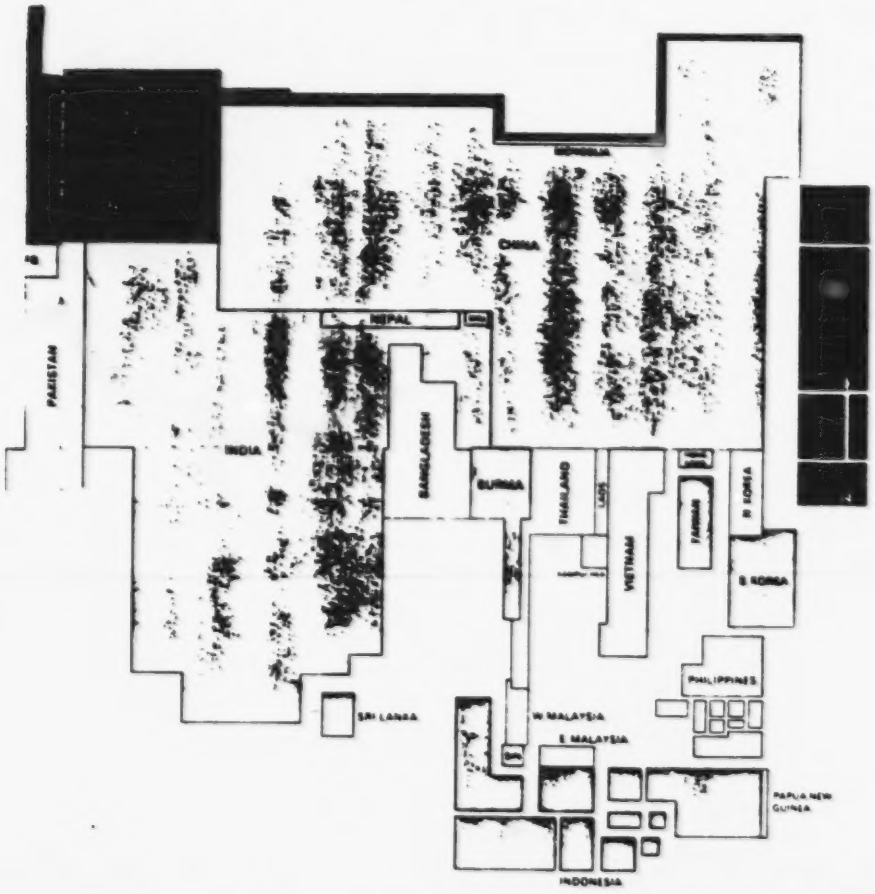
4. Is it correct to say that an exchange of strategic resources is necessary for the survival of industrial and nonindustrial nations? Give a reason for your answer.

5. Does an exchange of strategic resources result in a more or less interdependent world? Explain your answer.

15. Synthesizing Population Data

Description: Data on the population can be used as evidence for pertinent generalizations about India and other Asian nations. Data is often provided in the form of numbers which are useful for comparison. Another way to provide data is in the form of a map drawn according to the available numbers. On such a map, India and Asia are redrawn so that the relative size of each nation is proportional to its population. Similar maps can be drawn according to other data. Although specific information is not revealed by such a map, a mental image is made available which can be contrasted and compared with other mental images of Europe and the United States.[19]

An example of a mental image of India and Asia is noted below.



Test Yourself:

I. Use the above information and determine if the following statements are true or false. Mark a + if the statement is true. Mark a 0 if the statement is false.

_____ 1. The map on the verso is a mental map of India and Asia.

_____ 2. According to the map, the largest nation in Asia is China.

_____ 3. According to the map, India is the second largest nation in the world.

_____ 4. The map indicates nations in Asia according to physical size.

_____ 5. Judging from the key, India's population is over 1 billion.

II.

1. Use a reference source and detemine the current population of the ten largest nations in Asia.

2. Contrast and compare these nations' population with the population of the United States, North America, and Europe.

3. Draw a mental map of the United States, North America, and Europe according to the same scale as the map on the verso.

4. Devise a set of principles which would explain the relative distribution of population in these areas of the world.

5. Make a generalization which indicates the scope and location of a future "population crisis."

Learning Activities for Developing Skill in Understanding History

16. Locating Historic Sites

Description: Oral traditions often describe various sites as historic. Identifying historic sites, however, is often difficult. Especially helpful have been new techniques in archaeology which have made it possible to learn much about the past and the importance of some sites. In particular, available artifacts help identify a site and tell much about the way of life in years past. Archaeological discoveries about Mohenjo Daro, for example, indicate that this city was one of the major cities of the Indus civilization. It lay close to the Indus River in Sind, modern Pakistan, in the southern part of the area in which the Indus culture flourished. Then, the environment was probably quite favorable for settlement. Now, it seems arid and unfavorable.

Other sites of historic importance in South Asia include the following:

Taxila

Ajanta

Nagarjunakonda

Anuradhapura

Each of these sites provide artifacts indicating the importance of the site in the history of South Asia.[20]

Test Yourself:

I. Use the above information and determine if the following statements are true or false. Mark a + if the statement is true. Mark a O if the statement is false.

_____ 1. Archaeology is a way of learning from the material remains of a culture.

_____ 2. An example of an important historic site in India is Bombay.

_____ 3. Mohenjo Daro is located in India.

_____ 4. Artifacts often indicate change in the environment at a site.

_____ 5. The Ming Tombs are also a historic site in India.

II.

1. Locate the historic sites noted on the verso on an outline map of Asia.

2. Use library resources and determine when and how each of these sites played an important role and why it was important in the history of South Asia.

3. Why cannot the history Mohenjo Daro be completely reconstructed from available artifacts?

4. Locate the following historic sites on the outline map of Asia: Zhoukoudian; Anyang; Ming Tombs; Toro; Angkor Thom.

5. Use library resources and determine when each played an important role and why it was important in the history of Asia.

17. Making a Timeline

Description: The history of India and South Asia can be represented on a timeline. The timeline may be vertical or horizontal and is divided into equal units which represent the same number of years. The years are marked on the timeline. Events are identified on the timeline by a label and date OR a letter/number which identifies the event by a key placed below the timeline. A common practice is to identify events according to the new Christian calendar and omit the designation of A.D. in identifying modern dates. Dates identified by B.C. indicate the approximate number of years of the event before the birth of Christ. As different people use different calendars, dates are not precise indicators of when events occurred. Rather, they are most useful for organizing events in order of occurrence.

Some of the more important dates in the history of India and South Asia include the following:

2700 B.C.

544 B.C.

327 B.C.

273 B.C.

1487 A.D.

1510 A.D.

1813 A.D.

1857 A.D.

1947 A.D.

1971 A.D.

1984 A.D.

Test Yourself:

I. Use the above list of dates and determine if the following statements are true or false. Mark a + if the statement is true. Mark a 0 if the statement is false.

_____ 1. These dates are important dates in Indian history.

_____ 2. These dates are identified by the new Christian calendar.

_____ 3. Everyone would probably agree that the events represented by these dates occurred precisely on these dates.

_____ 4. These events could be placed on a timeline.

_____ 5. This timeline would be organized according to rulers of India.

II.

1. Identify an event which occurred on each of these dates in Indian history.

2. Make a horizontal timeline which identifies 10 of these events. Draw the timeline below.

3. Make a vertical timeline which identifies these dates according to A.D. and B.C. Draw the timeline in the margin.

4. Which timeline represent a more accurate history of India? Explain your answer.

5. Is it correct to say that both timelines indicate cause and effect relationships among events? Explain your answer.

18. Constructing a Timetable

Description: One way to organize historical information about India and the world is to make a timetable of events. A timetable of history is a chart organized by dates and includes events in history, ways of life, science/technology, and other events. Each entry on the chart identifies an important event in the year. Relationships between events may be indirect or direct. Appropriate inferences about relationships require additional research and are beyond the scope of a timetable.

An example of a timetable of history for India and the world is noted below for the year of 1857.

Year	History	Ways of Life	Science/Technology
1857	Peace of Paris ends Anglo-Persian war; shah recognizes independence of Afghanistan	Alpine Club, London, founded	Emile Coue, Fr. psychologist, b. (d.1926)
	James Buchanan inaugurated as 15th President of U.S.	"Atlantic Monthly" founded	Heinrich Hertz, Ger. physicist, b.(d.1894)
	Indian Mutiny against British rule; siege of Delhi begins; Delhi captured; British enter Cawnpore	Robert Baden-Powell, British general, founder of the Boy Scout movement, b. (d.1941)	Julius Wagner von Jauregg, Austrian neurologist and psychiatrist, 1927 Nobel Prize, b.(d.1940)
	Royal Navy destroys Chinese fleet; relief of Lucknow; Britain and France take Canton	Financial & economic crisis throughout Europe, caused by speculation in U.S. railroad shares	Pasteur proves that fermentation is caused by living organisms
	Garibaldi forms Italian National Association for unification of the country	Matrimonial Causes Act in Britain	Ronald Ross, English physician, specialist in tropical diseases, 1902 Nobel Prize, b. (d.1932)
	William H. Taft, future President of the U.S., b. (d.1930)	North German Lloyd founded (transatlantic steamship company)	
	Irish Republican Brotherhood (Fenians) founded in New York	Amerian civil engineer E. G. Otis installs first safety elevator	
	Czar Alexander II begins the emancipation of serfs in Russia	Science Museum, South Kensington, London, founded	
		Transatlantic cable laid (--1866)	

Test Yourself:

I. Use the above information and determine if the following statements are true or false. Mark a + if the statement is true. Mark a 0 if the statement is false.

_____ 1. The only way to organize historical information is to make a timetable.

_____ 2. Timetables of history describe relationships.

_____ 3. The major event in the history of India on the timetable was the laying of the transatlantic cable.

_____ 4. A timetable is a primary source of information.

_____ 5. The major event in the history of India on the timetable was not related to other events in the world.

II.

1. Identify two events which happened in 1857 for two other continents.

2. Use library resources to determine a relationship between two of these events in two different continents. Describe the relationships.

3. Note two other categories of events which could be added to the timetable. Note two events for each category.

4. Is it correct to say that 1857 was a turning point in the history of India and the world? Give two reasons for your answer.

5. Use a reference and make a timetable of history for two other turning points in the history of India.

19. Analyzing Disasters

Description: Environmental hazards can be classified into two types. Type 1 are disasters which are more immediate and limited in impact. Type 1 disasters include earthquakes, floods, fires, landslides, and droughts. Type 2 are catastrophes which are less immediate and wider in impact. Type 2 catastrophes include the death of a civilization, the human species, life on earth, the sum, or the universe. Disasters and catastrophes can be further classified by scope as indicated in the following chart.

Environmental Hazards

Type of Hazards	Class	Scope of Hazards	Type of Hazards	Class	Scope of Hazards
	)1	Person		)6	Civilization
	)2	Family		)7	Human Species
1	)3	Community	2	)8	Earth
	)4	Region or Nation		)9	Solar System
	)5	Several Regions or Nations		)10	Universe

Illustrative of a disaster or catastrophe in India was the event described below.[21]

It was an unseasonably cold night in Central India. In the shanty-towns of Bhopal, thousands of poor families were asleep. At a nearby railway station, a scattering of people waited for early-morning trains. Suddenly, at the local Union Carbide plant, a maintenance worker spotted a problem. A storage tank holding methyl isocyanate (MIC), a chemical used in making pesticides, was showing a dangerously high pressure reading. The worker summoned his boss. The supervisor put out an alert. But it was already too late. A noxious white gas had started seeping from the tank and spreading with the northwesterly winds. At the Vijoy Hotel near the railroad, sociologist Swapan Saha, 33, woke up with a terrible pain in his chest. "It was both a burning and a suffocating sensation," he said. "It was like breathing fire."

Test Yourself:

I. Use the above information and determine if the following statements are true or false. Mark a + if the statement is true. Mark a O if the statement is false.

_____ 1. Disasters and catastrophes are environmental hazards.

_____ 2. Type 1 hazards are less immediate and wider in impact.

_____ 3. Type 2 hazards are catastrophes.

_____ 4. A disaster which occurs in a nation is a Type 1 disaster.

_____ 5. The event described in India is Type 2 catastrophe.

II.

1. Translate the list of hazards into a continuum and identify an example of each class of hazards.

2. Use library resources and determine the scope, class, and type of the event described on the verso.

3. Is it correct to say that the description is a statement of fact? Give a reason for your answer.

4. Contrast and compare this event with a similar, potential, hazard in the United States.

5. Synthesize your knowledge of environmental hazards by describing, in writing, who is the enemy in times of disasters and catastrophes.

20. Evaluating the Last Word

Description: The effects of leadership are felt immediately after a person is no longer a leader. These include political, economic, social, religious, and psychological effects. Sometimes these effects are more apparent if the leader dies of other than natural causes. The last word of Indira Gandhi, for example, revealed many aspects of her leadership which were not readily apparent before. Her last word was Namaste, which means, in Hindi, "Greetings to you." Namaste is the traditional Indian greeting, accompanied by a crossing of hands before the face, as if the speaker was offering a prayer.

A contemporary account describing her last word is noted below.[22]

> At 9:08 last Wednesday morning, Indira Gandhi folded her hands in front of her face, looked at the two guards standing along the path to her office and said, "Namaste." It was to be her last word. Within hours India would be plunged into one of its worst paroxysms of sectarian violence since partition in 1947. As the death toll passed the 1,000 mark, the dominant question was whether the country's new leader, Indira's inexperienced son Rajiv, could, over the long term, sustain the integrity of the ambitious political patchwork that against all odds binds 746 million ethnically and religiously diverse people.

Test Yourself:

I. Use the above information and determine if the following statements are true or false. Mark a + if the statement is true. Mark a 0 if the statement is false.

_____ 1. The effects of leadership are always immediate.

_____ 2. The last word of Indira Gandhi was Namaste.

_____ 3. Violence is largely unknown in India.

_____ 4. The successor to Indira Gandhi was her son, Mohandas Gandhi.

_____ 5. Many people blamed her death on others.

II.

1. Use a library reference and determine the date of Indira Gandhi's death.

2. Is it correct to say that Rajiv Gandhi is the elected leader of India? Give a reason for your answer.

3. Make a list of effects of Indira Gandhi's leadership and compare it to a similar list of the leadership of the President of the United States.

4. Tell the meaning of the following phrase in your own words: "Within hours India would be plunged into one of its worst paroxysms of sectarian violence since partition in 1947."

5. Would it be appropriate to say that the last word of each of the Prime Ministers of India was Namaste? Explain you answer.

Checklist

Directions: Answer the following questions with a: Y for "yes," if you can perform this skill; N for "no," if you cannot perform this skill; S for "sometimes," if you can perform this skill sometimes.

I

In reading materials on India, can you:

_____ 1. define an allusion?

_____ 2. translate coins?

_____ 3. classify primary and secondary sources?

_____ 4. use appropriate reference books?

_____ 5. use appropriate continuing sources?

II

In applying critical thinking about India can you:

_____ 6. identify great leaders?

_____ 7. interpret historical fiction?

_____ 8. apply mathematical skills?

_____ 9. analyze festivals?

_____10. evaluate pilgrimages?

III

In interpreting the geography of India, can you:

_____11. read early maps?

_____12. draw inferences about location?

_____13. interpret satellite images?

_____14. analyze strategic resources?

_____15. synthesize population data?

IV

In understanding the history of India, can you:

_____16. locate historic sites?

_____17. make a timeline?

_____18. construct a timetable?

_____19. analyze disasters?

_____20. evaluate the last word of Ms. Gandhi?

Test

1. Allusions are references to:

   A. phrases and terms;

   B. dates;

   C. places;

   D. all of the above.

2. "Greased cartridges" is an allusion to the:

   A. bullets used in the War against Pakistan;

   B. bullets used in the war for independence;

   C. bullets used in 1857 mutiny;

   D. bullets used in war over Bengal.

3. Coins in India are used as:

   A. medium of exchange;

   B. legal tender;

   C. expression of wealth;

   D. all of the above.

4. The coins of Bharat are the coins of:

   A. British India;

   B. Portuguese India;

   C. Republic of India;

   D. Pakistan.

5. A primary source is a:

   A. factual source;

   B. first hand account;

   C. second hand account;

   D. fictional source.

6. A travel guide to India today is an example of a:

   A. primary source;

   B. secondary source;

   C. printed source;

   D. South Asian source.

7. The Times of India Directory and Yearbook is an example of a:

   A. general reference book;

   B. special reference book;

   C. primary source;

   D. Chinese source.

8. What is the best reference for primary sources in Indian history?

   A. an almanac;

   B. a collection of documents;

   C. a travel guide;

   D. the Worldmark Encyclopedia.

9. Hindu is an example of a/an:

   A. special reference;

   B. American source;

   C. Indian source;

   D. a source published in Taiwan.

10. Most continuing American sources differ from Indian sources of information on India as American sources are:

   A. free of bias;

   B. anti-India;

   C. government publications;

   D. published in one language.

11. Some leaders are considered great because of:

    A. public achievements;

    B. personal qualities;

    C. creativity;

    D. all of the above.

12. Which of the following leaders was not a leader in India:

    A. Buddha;

    B. Mohammed;

    C. Asoka;

    D. Gandhi.

13. Paul Scott's The Raj Quartet is an example of:

    A. fiction;

    B. history;

    C. scientific report;

    D. British view of India.

14. The Raj Quartet is to the United Kingdom as the Blue and the Grey is to:

    A. India;

    B. England;

    C. China;

    D. United States.

15. The zero is a:

    A. fact;

    B. fiction;

    C. concept;

    D. set.

16. In Hinduism, the zero is:

    A. unimportant;

    B. important in religion only;

    C. king of infinity;

    D. influential in many teachings.

17. The "Pola" festival is celebrated in:

    A. South Asia;

    B. Central India;

    C. Ceylon;

    D. Pakistan.

18. From an Indian point of view, who welcomed the American astronauts to the moon?

    A. Agni;

    B. Pola;

    C. Ganesha;

    D. Gandhi.

19. A pilgrimage is a/an:

    A. journey to a special place;

    B. required task of Hindu believers;

    C. takes place in January;

    D. unimportant task for many Indians.

20. For many in India, pilgrimages enable one to:

    A. visit resorts;

    B. become a better person;

    C. improve the community;

    D. all of the above.

21. Hakluyt's book on navigations is a:

    A. set of early maps;

    B. collection of first hand accounts;

    C. memoir of his explorations;

    D. description of French discoveries.

22. Cartography is the study of;

    A. art;

    B. science;

    C. map making;

    D. travel accounts.

23. India is located in continental:

    A. Europe;

    B. Eurasia;

    C. Asia;

    D. Northeast Asia.

24. The nearest southern neighbor to India is:

    A. Sri Lanka;

    B. Japan;

    C. People's Republic of China;

    D. Pakistan.

25. Landsat gathers data primarily through;

    A. aerial photography;

    B. remote sensing;

    C. electronic radar;

    D. radio telescopes.

26. A comparison of Landsat images of India and the United States, indicates:

    A. similarity in landforms;

    B. location at similar latitudes;

    C. vast productive plains;

    D. rivers as important waterforms.

27. Strategic resources are vital to a nation's:

    A. political needs;

    B. economic needs;

    C. social needs;

    D. prestige.

28. Which of the following strategic resources are available from India?

    A. cobalt;

    B. tungsten;

    C. chromium;

    D. manganese.

29. A population map of Asia indicates that India is:

    A. larger than China;

    B. about the same size as Japan;

    C. smaller than Indonesia;

    D. the second largest nation in Asia.

30. On a population map of the world, India would be shown as:

    A. larger than China;

    B. larger than the United States;

    C. about the same size as Brazil;

    D. the third largest nation in the world.

31. Mohenjo Daro is located in:

    A. India;

    B. Pakistan;

    C. Afghanistan;

    D. Sri Lanka.

32. Which of the following historic sites are not located in South Asia?

    A. Taxila;

    B. Angkor Thom;

    C. Ajanta;

    D. Anuradhapura.

33. Events marked on a timeline of Indian history indicate events which happened in:

    A. North America;

    B. East Asia;

    C. South Asia;

    D. nation of India.

34. The history of India as a nation is:

    A. longer than the history of Pakistan;

    B. longer than the history of the United States;

    C. shorter than the history of the Republic of China;

    D. about the same as the history of Japan.

35. A timetable of history for the year of 1857 indicates that:

    A. the Atlantic Monthly was founded;

    B. there was an Indian Mutiny;

    C. James Buchanan became President;

    D. all of the above.

36. A timetable for 1984 indicates it was a turning point in the history of:

    A. India;

    B. Pacific War;

    C. U.S.-P.R.C. alliance;

    D. Japan-USSR relations.

37. Type 1 disasters include:

    A. earthquakes;

    B. death of a civilization;

    C. extinction of the human species;

    D. destruction of the universe.

38. The accident at the Union Carbide plant in 1984 is an example of a:

    A. Type 1 environmental hazard;

    B. Type 2 environmental hazard;

    C. Type 3 environmental hazard;

    D. catastrophe.

39. The last word of Indira Gandhi was:

    A. Namaste;

    B. Farewell;

    C. Traitor;

    D. Bharat.

40. One of the effects of Indira Gandhi's death was:

    A. a surge of patriotism;

    B. much violence;

    C. a military takeover;

    D. peace throughout India.

Notes

1 Padma Perera "Ceremonies and Sustenance" Parabola Winter 9:4 page 74.

2 Unfortunately, there has been a significant decline in mastery of skills by social studies students. The decline is most marked by secondary students in contrast to no significant change by elementary students. Between 1972 and 1976, for example, the National Assessment of Social Studies indicated a significant decline for 13-year-olds and 17-year-olds but not for 9-year-olds. The decline for 13-year-olds was greater than the decline for 17-year-olds. See National Assessment for Education Progress Changes in Social Studies Performance, 1972-1976 (Denver, Colorado: National Assessment of Educational Progress, 1978) pages 17-18.

3 The 1963 Yearbook of the National Council for the Social Studies (Washington D.C.: NCSS, 1963) identifies shared and primary skills. Some of these skills are discussed in the 1970, 1971, 1975, and 1976 Yearbooks. The NCSS Bulletin 54 1977 includes discussion of skills education in the context of teaching world history.

4 The inquiry and discipline models of thinking are described by I. A. Snook in "Teaching Pupils to Think" Studies in Philosophy and Education #2 1973 pages 146-162.

5 Representative learning activities are described in Focus on Asian Studies and Papers of the Service Center for Teachers of Asian Studies.

6 "Decision-making" was the focus of the 1977 Yearbook of the National Council for the Social Studies (Washington D.C.: NCSS, 1977).

7 Typical geography learning activities include reviewing latitude and longitude, and relate world regions. Typical history learning activities include using the calendar, and classifying events according to ancient, medieval, and modern times.

8 The pitfalls in processing historical information with uniform devices is discussed by Elizabeth L. Eisenstein in "Clio and Chronos" History and the Concept of Time (Middleton, Connecticut: Wesleyan University Press, 1966).

9 These procedures follow closely the Oregon Direct Instruction model derived from recent correlational studies on reading and mathematics instruction in the elementary grades. This model is described by Barak Rosenshine and Linda Meyers in "Staff Development for Teaching Basic Skills" Theory Into Practice June 1978 pages 267-271.

10 "Modern Asian Leaders" Focus on Asian Studies 4:1 Fall 1984.

11 Paul Carus Logical and Mathematical Thought (Chicago: Open Court, 1909) passim.

12 Jeanne Benedick Mathematics Illustrated Dictionary (New York: McGraw-Hill, 1965) page 207.

13 "Buddha's Advice . . ." was described by Eric Temple Bell in The Mathematics Teacher October 1940 33:10 pages 252-262 and reprinted in The Mathematics Teacher May 1969 pages 373-383.

14 Padma Perera "Ceremonies and Sustenance" Parabola 9:4 Winter 1984 page 77.

15 Lizelle Reymond "Intimate Journeys: Parabola 9:3 Fall 1984 pages 43-44.

16 Other definitions of India are included in current editions of travel guides.

17 See Mission to Earth: Landsat Views the World (Washington D.C.: NASA, 1976) for images of India.

18 Josiah Tlou "Teaching International Trade of Strategic Minerals" Social Studies September-October 1984 page 193+.

19 For current data, use the current World Population Data Sheet available from the Population Reference Bureau.

20 Cambridge Encyclopedia of Archaeology (New York: Crown, 1980).

21 "It Was. . . Fire" Newsweek December 17, 1984 page 26+.

22 "Death in the Garden" Time November 12, 1984 page 42+.

References

Learning Activity	Reference
1.	Thomas Harbottle Dictionary of Historical Allusions (Detroit, MI: Gale, 1968) a reprint of the 1904 book.
2.	Fred Reinfeld and Burton Hobson, Catalogue of the World's . . . Coins (New York: Sterling, 1983).
3.	William T. deBary et al Sources of Indian Tradition (New York: Columbia, 1966).
4.	Brijen K. Gupta India (Santa Barbara, CA: Clio, 1984).
5.	Phillips Talbot "India in the 1980s" Headline Series #262 1983.
6.	John Canning ed. 100 Great Kings, Queens (New York: Taplinger, 1967). Also see Ann Ruth Willner The Spellbinders (New Haven, CT: Yale University Press, 1984).
7.	G. R. Garg Encyclopedia of Indian Literature (New Delhi: Mittal, 1983).
8.	Betty Heinmann Facets of Indian Thought (London: Allen & Unwin, 1964).
9.	Celebration of life in regard to reincarnation is discussed by John L. Krueger The Hindu Doctrines Indiana Religion Studies Project 1980.
10.	India: A Reference Annual.
11.	Tony Campbell Early Maps (New York: Abbeville Press, 1981).

Learning Activity	Reference
12.	An "inside" view of India is provided in Paul Theroux "By Rail Across India" and Michael G. Satow "India's Railway Lifeline" in the National Geographic Magazine June 1984 165:6 pages 696-750.
13.	Educator's Guide for Mission to Earth (Washington D.C.: (Government Printing Office, 1978).
14.	U.S. Bureau of Mines Mineral Commodity Summary 1981.
15.	Learning activities for teaching about population and other aspects of India are noted in the special issue of Focus on Asian Studies #1 Fall 1985.
16.	Atlas of Archaeology (New York: St. Martin's Press, 1982).
17.	Vincent Arthur Smith Oxford History of India (London Oxford University Press), 1981 fourth edition.
18.	Bernard Grun Timetables of History (New York: Simon and Schuster, 1979) Updated Edition.
19.	A simulation of a specific disaster (due to monsoon failure is provided by We Are Thirsty on a disc for Apple II + and "e" computers and is available from the Geography Curriculum Project at the University of Georgia.
20.	"After Indira" Newsweek November 12, 1984.